

WORK PLAN FOR PACKAGING, TRANSPORTATION AND DISPOSAL

AT

THE SYNKOTE PAINTS SITE
ELMWOOD PARK, NEW JERSEY

ISSUED:

APRIL 24, 1990

PREPARED BY:

S&D ENGINEERING SERVICES, INC.

2 GOURMET LANE

EDISON, N.J. 08837

PREPARED FOR:

DWAYNE HARRINGTON

RESPONSE & PREVENTION BRANCH

U.S. EPA REGION II

EDISON, N.J. 08837

268875



TABLE OF CONTENTS

1. Introduction
2. Scope of Work
 - 2.1 Containerized Wastes
 - 2.1.1 Sampling & Analysis (completed)
 - 2.1.2 TSDF Acceptance
 - 2.1.3 Repackaging
 - 2.1.4 Transportation
 - 2.1.5 Final Disposal
3. Project Organization
 - 3.1 Roles & Responsibilities
 - 3.2 Key Personnel
4. Appendices
 - I. Container Inventory (Categorized), Analytikem Report No. A 60158
 - II. Drum Handling Procedures
 - III. Decontamination Procedures
 - IV. Waste Stream Identification
 - V. Field Log Book

1. INTRODUCTION

Synkote Paints manufactured solvent-based industrial coatings from 1956 until the company filed for bankruptcy in 1985. At that time, the building was abandoned and approximately 300 drums, containers and reactor vessels were abandoned on the site. The property was foreclosed upon by the National Community Bank of New Jersey in 1986 for unpaid mortgage debts and purchased via a sheriff's sale in 1988 by Property Concepts, Inc., Elmwood Park, New Jersey. The building is currently unoccupied.

The site, shown in Figure 1, is located in a mixed residential/light industrial area at 144-160 Van Riper Avenue, Elmwood Park, New Jersey. The site consists of one building of approximately 20,000 square feet, located on a one-half acre lot enclosed by an eight foot perimeter fence. The site is adjacent to an operating facility and is directly across the street from a residential neighborhood. Approximately 5,000 people live within a one-half mile radius of the site.

The building consists primarily of two large storage/operations rooms. The building is accessible through three building entrance doors, two large garage doors, and numerous windows. The current owner of the site has recently boarded the doors and windows of the building as a deterrent against break-ins and vandalism at the site.

There are approximately 300 drums, containers, and reactor vessels of hazardous substances that are stored on the site. Labels on some of the containers indicate the contents to be predominantly solvents, corrosives and paint waste solutions.

In October, 1989, S&D Environmental conducted the sampling of approximately 200 overpacked drums. These drums are stored in the east section of the Synkote building. At the same time, multiple assorted chemicals from the lab benches, located in the processing room, were lab packed in 30 gallon fibre drums and are staged alongside the overpacked drums.

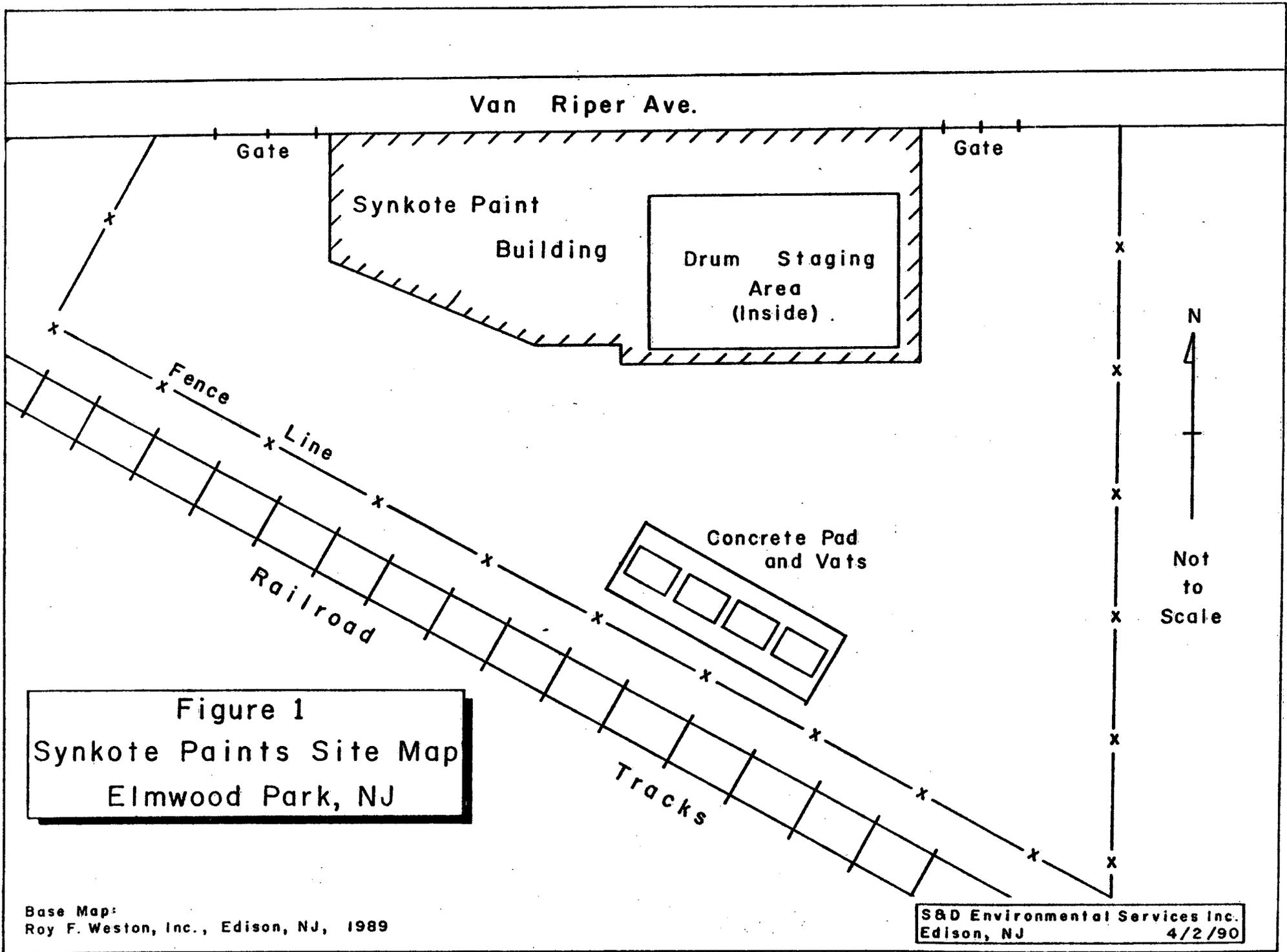


Figure 1
Synkote Paints Site Map
Elmwood Park, NJ

Base Map:
Roy F. Weston, Inc., Edison, NJ, 1989

S&D Environmental Services Inc.
Edison, NJ 4/2/90

2. SCOPE OF WORK

Our objective is:

Repackaging, transportation and disposal of hazardous wastes at the Synkote Paints site in Elmwood Park, New Jersey.

S&D will conduct removal activities in the Synkote Paints facility. We will repackage drums which are in poor condition and stage them in a secure area until transported and disposed of. The procedure is as follows:

1. TSDF Acceptance
2. Repackaging
3. Transportation
4. Final Disposal

Completion of each of these tasks will depend upon data review and acceptance of the waste by a disposal firm. Actual costs will depend on personnel, equipment, transportation and final disposal.

Listed below is the overall estimated work schedule:

<u>TASK</u>	<u>DESCRIPTION</u>	<u>ESTIMATED TIME FOR COMPLETION (days)</u>
1	Preparation & Planning	4/30/90
2	Mobilization & Set Up	5/11/90
3	Drum Handling & Repacking	5/25/90
4	Empty Drum Handling	5/25/90
5	Removal & Disposal of Hazardous Waste	5/31/90
6	Demobilization	6/8/90

Task Description

The following describes the procedures and equipment necessary to complete each portion of the job. All work will be performed by personnel with 40 hrs. OSHA training and will be in compliance with all Federal, State and Local regulations. Equipment will be decontaminated by a steam cleaner or pressure washer if necessary. Wash fluids, including personnel decontamination fluids, if generated, will be handled per EPA instructions.

Task 1, Preparation and Planning

The preparation and planning stage will be utilized to locate and coordinate necessary equipment, materials and subcontractor services, including disposal. S&D site personnel will be briefed on the scope of work and their specific tasks.

Task performed by:

Response Manager/Foreman/Clerk
Clean Up Technicians

Task 2, Mobilization and Equipment Set Up

Workers and equipment will arrive on site. All equipment will be checked and staged. Personnel and equipment decontamination areas will be set up. Documentation will be established, including drum inventory and field logs.

Task performed by:

Response Manager/Foreman
4 Clean Up Technicians

Task 3, Drum Handling and Repackaging

Drum handling and packaging is described in Appendix II, "Drum Handling SOP".

Task performed by:

Response Manager/Foreman
4 Clean Up Technicians, 1 Equipment Operator

Task 4, Empty Drum Handling

Options for empty drum handling include: cleaning and shipping to drum recycler/incinerator or crushing and shipment off-site as bulk hazardous or non-hazardous waste. Only drums with <1" of residue remaining will be sent to a drum recycler. Any drum that cannot be emptied to <1" will be treated as a hazardous waste drum.

Task performed by:

Response Manager/Foreman
Equipment Operator
Clean Up Technicians

Task 5, Demobilization

Demobilization will consist of ensuring all equipment, lab and work areas are properly secured prior to leaving the site. It is not anticipated that any equipment or material will remain on site.

Task 6, Removal and Disposal of Hazardous Waste

Drummed hazardous wastes will be loaded onto box trucks or trailers for shipment to a TSD facility. A Bobcat with drum handling attachments will be utilized for this task. All drums, containers and vehicles will have proper labels and placards according to DOT and RCRA specs. All TSDF's and transporters will be fully licensed and approved by the EPA.

Task performed by:

Response Manager/Foreman
Equipment Operator
Clean Up Technicians

2.1.1 Sampling and Analysis

Completed October, 1989. See Appendix I.

2.1.2 TSDF Acceptance

Using the analysis from sampling results, waste profile sheets will be completed and sent to disposal facilities for acceptance. Some facilities may require a representative sample of the material.

2.1.3 Repackaging

Once the TSDF acceptance process has begun, the material will either be kept in its original overpack or repackaged if the overpack is in poor condition. All "RCRA empty" steel drums generated from the bulking process will be sent to a drum recycler, where the drums will be treated to remove any residue. The drums will then be recycled as reconditioned drums or as steel scrap. Only drums with less than 1 inch of residue remaining in the drum will be sent to a drum recycler. Any drum that cannot be emptied to less than 1' will be treated as a hazardous waste drum (see Figure 2).

2.1.4 Transportation

After waste is accepted by an approved TSDF and properly repackaged, transportation to the facility must be in accordance with RCRA & DOT. This includes proper manifesting, labeling and placarding. All waste will be hauled by licensed hazardous waste transporters.

Drum Disposal Decision Tree

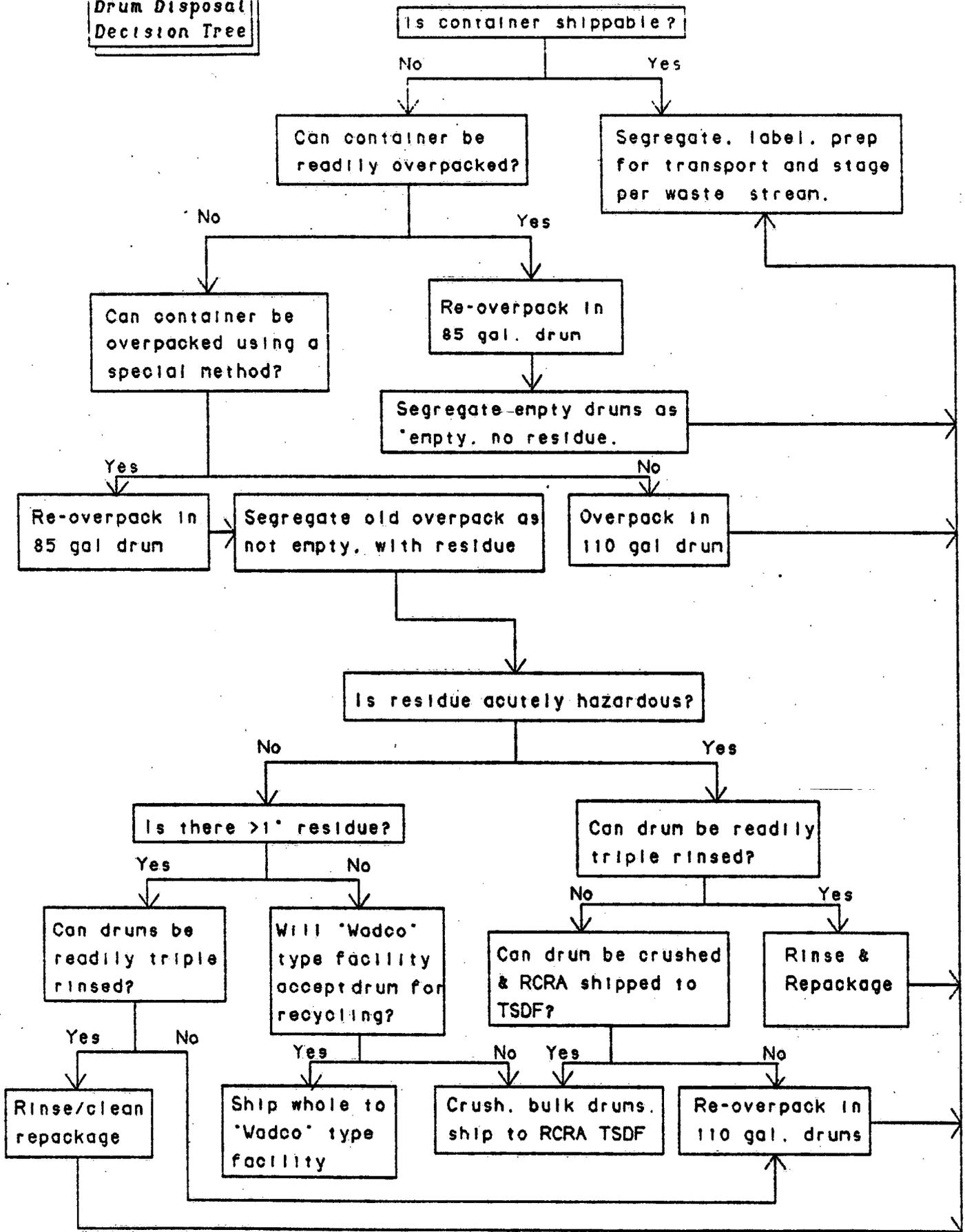


Figure 2

DRUM PROCESSING PROTOCOL

S&D Environmental Services, Inc.
Edison, NJ 4/9/90

2.1.5 Final Disposal

The final disposal of the materials will depend on the characteristics of the wastes.

3. PROJECT ORGANIZATION

There will be three primary organizations functioning cooperatively at this site: U.S. EPA Region II, S&D Engineering Services, Inc. (ERCS Contractor), and Roy F. Weston (TAT Contractor).

3.1 ROLES AND RESPONSIBILITIES

On-Scene Coordinator (OSC):

The OSC, as the representative of the U.S. EPA, is responsible for overall project administration and for coordinating health and safety standards for all individuals on-site at all times. All applicable OSHA standards shall be applied. However, each contractor (as an employer under OSHA) is also responsible for the health and safety of its employees. If there is any dispute with regards to health and safety, the following procedures shall be followed:

- 1) Attempt to resolve the issue on-site; and,
- 2) If the issue cannot be resolved, on-site personnel shall consult offsite supervisors for assistance and the specific task operation in dispute shall be discontinued until the issue is resolved.

Response Manager (RM):

The Response Manager, as the field representative for S&D Engineering Services, Inc., has the responsibility for fulfilling the terms of the delivery order. The RM must oversee the project and ensure that all technical, regulatory and safety requirements are met. It is the RM's responsibility to communicate daily with the OSC regarding site clean-up progress and any problems encountered.

Technical Assistance Team (TAT):

The Technical Assistance Team is responsible for providing the OSC with assistance and support in regards to all technical, regulatory and safety aspects of site activity. The TAT is also available to advise the OSC on matters relating to sampling, treatment, packaging, labeling, transport, and disposal of hazardous materials, but is not limited to the above-mentioned.

3.2 Key Personnel

U.S. EPA On-Scene
Coordinator (OSC):

Dwayne Harrington
Response and Prevention Branch
Edison, New Jersey 08837
(201) 906-6812

Alternate OSC:

U.S. EPA Region II
Edison, New Jersey 08837
(201) 906-6930

ERCS Contractor:

S&D Engineering Services, Inc.
2 Gourmet Lane
Edison, New Jersey 08837
(201) 549-8778

Response Manager (RM)

George Press
S&D Engineering Services, Inc.
2 Gourmet Lane
Edison, New Jersey 08837
(201) 549-8778

Subcontractor:

Thermal Ken

Site Health & Safety Officer:

OSC Dwayne Harrington (EPA)

Alt. Health & Safety Officer:

Michael Mentzel (TAT)

Technical Assistance Team (TAT):

Roy F. Weston, Inc.
1090 King Georges Post Road
Suite 201
Edison, New Jersey 08837
(201) 225-6116

TAT Representatives:

Michael Mentzel
Beverly Lawson

APPENDIX I

CONTAINER INVENTORY

FROM ANALYTIKEM TEST REPORT NO. A60158

TEST REPORT NO. A60158

November 16, 1989

Prepared for:

S & D Engineering
2 Gourmet Lane
Edison, NJ 08837

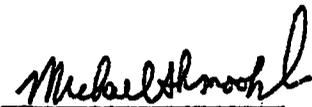
Attention: Jerry Laurizio

Project: Synkote Paints

Date of Sample Receipt: October 18, 1989

SC Certification No. SC 46067

Reviewed &
Approved by:



Name Michael Shmookler, Ph.D.

Title Technical Director

II. Sample Designations

<u>AnalytiKEM Designation</u>	<u>Client Designation</u>	<u>AnalytiKEM Designation</u>	<u>Client Designation</u>
A60158-1	S-6	A60158-41	S-54
A60158-2	S-11	A60158-42	S-55
A60158-3	S-12	A60158-43	S-56
A60158-4	S-13	A60158-44	S-57
A60158-5	S-14	A60158-45	S-58
A60158-6	S-15	A60158-46	S-59
A60158-7	S-16	A60158-47	S-60
A60158-8	S-17	A60158-48	S-61
A60158-9	S-18	A60158-49	S-62
A60158-10	S-19	A60158-50	S-63
A60158-11	S-20	A60158-51	S-64
A60158-12	S-21	A60158-52	S-66
A60158-13	S-22	A60158-53	S-67
A60158-14	S-24	A60158-54	S-68
A60158-15	S-25	A60158-55	S-69
A60158-16	S-27	A60158-56	S-70
A60158-17	S-28	A60158-57	S-71
A60158-18	S-31	A60158-58	S-72
A60158-19	S-32	A60158-59	S-73
A60158-20	S-33	A60158-60	S-74
A60158-21	S-34	A60158-61	S-75
A60158-22	S-35	A60158-62	S-76
A60158-23	S-36	A60158-63	S-77
A60158-24	S-37	A60158-64	S-78
A60158-25	S-38	A60158-65	S-79
A60158-26	S-39	A60158-66	S-80
A60158-27	S-40	A60158-67	S-81
A60158-28	S-41	A60158-68	S-82
A60158-29	S-42	A60158-69	S-83
A60158-30	S-43	A60158-70	S-84
A60158-31	S-44	A60158-71	S-86
A60158-32	S-45	A60158-72	S-87
A60158-33	S-46	A60158-73	S-88
A60158-34	S-47	A60158-74	S-89
A60158-35	S-48	A60158-75	S-90
A60158-36	S-49	A60158-76	S-91
A60158-37	S-50	A60158-77	S-92
A60158-38	S-51	A60158-78	S-93
A60158-39	S-52	A60158-79	S-94
A60158-40	S-53	A60158-80	S-95

II. Sample Designations (Cont'd)

<u>AnalytiKEM Designation</u>	<u>Client Designation</u>	<u>AnalytiKEM Designation</u>	<u>Client Designation</u>
A60158-81	S-96	A60158-115	S-131
A60158-82	S-97	A60158-116	S-132
A60158-83	S-98	A60158-117	S-134
A60158-84	S-99	A60158-118	S-135
A60158-85	S-100	A60158-119	S-136
A60158-86	S-101	A60158-120	S-137
A60158-87	S-102	A60158-121	S-138
A60158-88	S-103	A66158-122	S-139
A60158-89	S-104	A60158-123	S-140
A60158-90	S-105	A60158-124	S-141
A60158-91	S-106	A60158-125	S-142
A60158-92	S-107	A60158-126	S-143
A60158-93	S-108	A60158-127	S-144
A60158-94	S-109	A60158-128	S-145
A60158-95	S-110	A60158-129	S-147
A60158-96	S-111	A60158-130	S-148
A60158-97	S-112	A60158-131	S-149
A60158-98	S-113	A60158-132	S-150
A60158-99	S-114	A60158-133	S-151
A60158-100	S-115	A60158-134	S-152
A60158-101	S-116	A60158-135	S-153
A60158-102	S-117	A60158-136	S-154
A60158-103	S-118	A60158-137	S-155
A60158-104	S-119	A60158-138	S-156
A60158-105	S-120	A60158-139	S-157
A60158-106	S-122	A60158-140	S-158
A60158-107	S-123	A60158-141	S-159
A60158-108	S-124	A60158-142	S-160
A60158-109	S-125	A60158-143	S-161
A60158-110	S-126	A60158-144	S-162
A60158-111	S-127	A60158-145	S-163
A60158-112	S-128	A60158-146	S-164
A60158-113	S-129	A60158-147	S-165
A60158-114	S-130	A60158-148	S-166
		A60158-149	S-167

II. Sample Designations (Cont'd)

<u>AnalytiKEM Designation</u>	<u>Client Designation</u>	<u>AnalytiKEM Designation</u>	<u>Client Designation</u>
A60158-150	S-168	A60158-189	S-209
A60158-151	S-169	A60158-190	S-210
A60158-152	S-170	A60158-191	S-211
A60158-153	S-171	A60158-192	S-212
A60158-154	S-172	A60158-193	S-213
A60158-155	S-173	A60158-194	S-214
A60158-156	S-176	A60158-195	S-215
A60158-157	S-177	A60158-196	S-216
A60158-158	S-178	A60158-197	S-217
A60158-159	S-179	A60158-198	S-218
A60158-160	S-180	A60158-199	S-219
A60158-161	S-181	A60158-200	S-220
A60158-162	S-182	A60158-201	S-221
A60158-163	S-183	A60158-202	S-222
A60158-164	S-184	A60158-203	S-223
A60158-165	S-185	A60158-204	S-224
A60158-166	S-186	A60158-205	S-225
A60158-167	S-187	A60158-206	S-226
A60158-168	S-188	A60158-207	S-228
A60158-169	S-189	A60158-208	S-229
A60158-170	S-190	A60158-209	S-230
A60158-171	S-191	A60158-210	PS-1
A60158-172	S-192	A60158-211	PS-2
A60158-173	S-193	A60158-212	PS-3
A60158-174	S-194	A60158-213	PS-4
A60158-175	S-195	A60158-214	PS-5
A60158-176	S-196	A60158-215	PS-6
A60158-177	S-197	A60158-216	PS-7
A60158-178	S-198	A60158-217	PS-8
A60158-179	S-199	A60158-218	PS-9
A60158-180	S-200	A60158-219	PS-10
A60158-181	S-201	A60158-220	PS-11
A60158-182	S-202	A60158-221	PS-12
A60158-183	S-203	A60158-222	PS-13
A60158-184	S-204	A60158-223	PS-14
A60158-185	S-205	A60158-224	PS-15
A60158-186	S-206	A60158-225	PS-16
A60158-187	S-207	A60158-226	PS-17
A60158-188	S-208		

Test Report No. A60158
Page 5

III. Composite Description

A60158-227 Composite A: AnalytiKEM samples A60158-

1, 6, 13, 19, 20 31, 34, 99, 114, 117, 121, 155,
185, 204

14

A60158-228 Composite B: AnalytiKEM samples A60158-

18, 32, 48, 59, 63, 64, 67, 77, 88, 90, 91, 126,
151, 159, 190, 196, 215, 216

18

A60158-229 Composite C: AnalytiKEM samples A60158-

14, 62, 65, 100, 137, 145, 146, 147, 153, 182

10

A60158-230 Composite D: AnalytiKEM samples A60158-

4, 5, 15, 30, 41, 52, 61, 72, 93, 96, 101,
102, 104, 105, 106, 136, 141, 162, 163, 168, 200, 212,
224

23

A60158-231 Composite E: AnalytiKEM samples A60158-

7, 8, 9, 10, 11, 21, 23, 24, 25, 26, 29, 35,
37, 42, 44, 50, 54, 55, 57, 68, 71, 74, 75, 76,
81, 92, 97, 115, 118, 119, 120, 123, 125, 129,
130, 131, 132, 134, 138, 139, 143, 150, 156, 160,
161, 170, 175, 176, 177, 183, 184, 187, 188, 189,
197, 202, 203, 205, 206, 207, 214

61

Note: Samples will be retained for 30 days beyond the test report date unless otherwise requested.

III. Composite Description (Cont'd)

A60158-232 Composite F: AnalytiKEM samples A60158-

39, 60, 69, 70, 73, 78, 79, 80, 82, 83, 87, 98,
108, 109, 110, 111, 113, 122, 127, 135, 149, 158,
164, 173, 174, 178, 180, 193, 198, 199, 201, 209

32

A60158-233 Composite G: AnalytiKEM samples A60158-

2, 3, 12, 16, 17, 33, 36, 38, 40, 45, 46, 47, 49,
51, 53, 56, 66, 133, 140, 142, 144, 154, 157,
186, 195, 208, 219, 218, 220, 221, 222, 223,

32

A60158-234 Composite H: AnalytiKEM samples A60158-

43, 84, 85, 86, 89, 169, 181, 191, 211, 213, 225, 226,

12

A60158-235 Composite I: AnalytiKEM samples A60158-

22, 27, 28, 58, 107, 112, 148, 152, 165, 166,
167, 171, 172, 179, 192, 194, 210

17

A60158-236 Composite J: AnalytiKEM samples A60158-

94, 95, 103, 116, 124, 128

6

Note: Samples will be retained for 30 days beyond the test report date unless otherwise requested.

APPENDIX II

DRUM HANDLING

APPENDIX II

DRUM HANDLING, DRUM SAMPLING, SPECIAL WASTE HANDLING

Drum and Special Waste Handling Protocol

- A. Personnel involved in handling and transporting drummed waste shall work in teams containing no fewer than two people. Visual contact shall be maintained between members of the working team at all times. All team members shall be able to communicate between themselves and with the Safety Officer by two-way radio at all times on the work site.
- B. Preliminary Classification
1. Prior to physically handling a drum, the following preliminary classifications check list shall be completed:
 - a. Is the drum radioactive?
 - b. Does the drum exhibit leakage or deterioration, i.e., is it unsound?
 - c. Does the drum exhibit apparent internal pressure?
 - d. Is the drum empty?
 - e. Does the drum contain markings which would indicate that the contents are potentially explosive?
 2. The results of the preliminary classification checklist shall dictate which specific procedures specified below shall be followed.
- C. Leaking or Deteriorated Drums
1. The contents of drums that exhibit leakage or apparent deterioration such that movement will cause rupture (determined by the Safety Officer) shall immediately be transferred to a repack drum. Equipment, including transfer pumps used in the repack operation, shall be of explosion proof construction.
 2. Leaking drums containing sludges or semi-solids, drums that are structurally sound but which are open and contain liquid or solid waste, and drums which are deteriorated but can be moved without rupture, shall be immediately placed in overpack containers.
- D. Bulged Drums
1. Drums which potentially may be under internal pressure, as evidenced by bulging, shall be sampled in place. Extreme care shall be exercised when working with and adjacent to potentially pressurized drums.
 2. Should movement of a pressurized drum be unavoidable, handling shall be by a grappler unit constructed for explosive containment. The bulge drum shall be moved only as far as necessary to allow seating on firm ground or shall be carefully overpacked.

3. Openings into pressurized drums shall be plugged and the bung holes fitted with pressure venting caps set at 5 psi release.

E. Drums Containing Explosive or Shock Sensitive Waste

1. Drums that contain wastes that have been identified by sampling, or are suspected by visual examination to be explosive in nature, shall be handled with extreme caution. Initial handling shall be by a grappler unit constructed for explosive containment. Drums shall be palletized prior to transport to high hazard interim storage and disposal area.
2. If at any time during remedial activities, an explosive, pursuant to provisions of Title 18, U.S. Code, Chapter 40 (Importation, Manufacture, Distribution, and Storage of Explosive Materials, 1975 Explosives List) is identified, it should be secured and the appropriate state and federal agencies notified.
3. Identification of an explosive substance during the course of a remedial action is usually based on the experience of the on-site personnel. Potentially explosive materials usually may be identified by their physical characteristics -- texture, color, density, etc., as well as the way they are packaged or labeled. Most explosives are solids. In some cases they are packaged in water-tight containers to exclude water, while in other cases they are package wet to preclude explosion.
4. Prior to handling or transporting drums containing explosive wastes, personnel working in the area shall be removed to a safe distance. Continuous contact with the communication base shall be maintained until handling or transporting operations are complete. An audible siren signal system, similar to that employed in conventional blasting operations, shall be used to signify the commencement and completion of explosive waste handling or transporting activities.

F. Drums Containing Radioactive Waste

1. Drums containing radioactive wastes shall not be handled until radiation levels have been determined by an initial field survey conducted by the contractor. Survey shall include direct gamma readings and laboratory analysis of drum surface wipe samples.
2. Depending on the level of radiation encountered, handling and transport may require special shielding devices to protect personnel. Following handling and transport, equipment used shall be surveyed by the Safety Officer and decontaminated to background levels prior to recommencing work. Surveys shall also be made of the ground surface in the vicinity of original drum storage to identify potential soil contamination by spilled or leaked radioactive waste. Prior to recommencing work in the area, radioactive soil areas shall be isolated to prevent tracking of radioactive contaminants about the site.

G Packaged Laboratory Wastes (Lab Packs)

1. Drums known or suspected of containing discarded laboratory chemicals, reagents or other potentially dangerous materials in small volume, or individual containers shall be handled with extreme caution. Until otherwise categorized, they shall be considered explosive or shock sensitive wastes. Initial handling shall be by a grapppler unit constructed for explosive containment. Drums shall be palletized and overpacked if required prior to transport to the Lab Pack staging for sorting, identification, repacking and/or stabilization.
2. Prior to handling or transporting Lab Packs from the existing drum area, personnel working in the immediate area shall be removed to a safe distance. Continuous contact with the communication base shall be maintained until handling or transporting operations are complete. An audible siren signal system, similar to that employed in conventional blasting operations will be used to signify the commencement and cessation of Lab Pack handling or transporting activities.

H Air Reactive Wastes

1. If the presence of an air reactive substance is verified or even suspected by a contractor, the material should be immediately segregated and transported to a separate high hazard interim storage and disposal area.
2. Air reactive wastes may be discovered during opening or sampling operations. Air reactive substances normally require special packaging. They may be stored under water or some other liquid to minimize air contact. They may also be found in sealed ampules, corrugated drums, stainless steel canisters, or specially lined drums. Some chemicals, such as white phosphorus or barium oxide, react with oxygen in the air, while others, such as sodium, cesium or various metal hybrids, react with the moisture or water vapor in the air. Many of these compounds are explosive when they come in contact with air or water.

I Gas Cylinders

1. Gas cylinders, when encountered, should be stored and disposed of on a specific case basis depending on the integrity of the cylinders and type of substance they are expected to contain.

J Empty Drums

1. Empty drums containing less than 1 in. of solid residual waste and those resulting from on-site bulking and repack operations shall be loaded by grapppler into transport equipment and placed within the empty drum staging area. Residuals, where possible, shall be transferred to repack containers prior to movement. Additional information on the definition of empty drums can be found in 40 CFR 2617. Also, limitations on the reuse of drums can be found in 49 CFR 173.28.

K General Drum Handling Procedures

1. The handling, movement, and transport of drums would be by use of mechanical equipment only; no drums should be handled manually.
2. Remote drum handling equipment shall consist of a grappler equipped backhoe or front end loader. Drum transportation should be with front end loaders or fork lifts with modified carrying platforms.

Portions of equipment that contact drums or canisters should be constructed of non-ferrous metals or contact portions should be coated or lined to preclude spark generation.

Handling and transport equipment should be equipped with full frontal and side splash and explosion shields. Class ABC fire extinguishers shall be fitted to the body of each piece of equipment.

Equipment should be maintained in first class condition. The ignition manifold and exhaust components shall be maintained to prevent backfiring or generation of sparks within the exhaust gases.

7

APPENDIX III

DECONTAMINATION PROCEDURES

DECONTAMINATION/CLEAN UP PROCEDURES

- Wash with low phosphate detergent
- Tap water rinse
- Rinse water rinse
- Rinse with 10% nitric acid
- Tap water rinse
- Solvent rinse - choice of either:
 - a. Methanol followed by hexane rinse
 - b. Acetone rinse
- Deionized water rinse
(demonstrated analyte free)
- Air dry
- Wrap in aluminum foil for transport
(shiny side out)

Note: Heavy equipment will be decontaminated by a steam cleaner or pressure washer if necessary.

APPENDIX IV

WASTE STREAM IDENTIFICATION

Waste Stream Identification Form

Job Name _____ Job # _____

Location _____

Generator/Operator _____

Sample # _____ Date/Time _____

Sample eq _____ Sample Container _____

Sampler(s) _____

Container Sampled _____ Type of Sample Container _____

Physical State:

Powder _____ Paste _____ Solid _____ Liquid _____

Sludge _____ Slurry _____ Resin _____ Aerosol _____

Lab Pack _____ Gas (Cylinder) _____ Other _____

Color _____

Odor _____

Single Phase _____ Bi-Phased _____ Multi-Phased _____

Free Liquids _____

pH _____

Field Analysis _____

Description: _____

Comments: _____

Signature _____

APPENDIX V

FIELD LOG BOOK

Field Log Book Entries

All information pertinent to a field survey and/or sampling must be recorded in a log book. This must be a bound book, preferably with consecutively numbered pages that are 21.6 by 27.9 cm (8-1/2 by 11 in.). Entries in the log book must include at least the following:

Purpose of sampling (e.g., surveillance, etc.)

Location of sampling (e.g., hauler, disposal site, etc.) and address

Name and address of field contact

Producer of waste and address

Type of process (if known) producing waste

Type of waste (e.g., sludge, wastewater, etc.)

Declared waste components and concentrations

Number and volume of samples taken

Description of sampling point

Date and time of collection

Collector's sample identification number(s)

Sample distribution (e.g., laboratory, hauler, etc.)

References such as maps or photographs of the sampling site

Field observations

Any field measurements made such as pH, flammability, etc.

Sampling situations vary widely. No general rule can be given as to the extent of information that must be entered in the log book.